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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

JOINT APPLIED PROJECT

INCREASING COMPETITIVE ACTIONS: A FOCUS ON TECHNICAL DATA RIGHTS ASSOCIATED WITH NON-COMMERCIAL HARDWARE ITEMS

**By: Eric J. Liedke, and
Jeffrey D. Simonis
June 2014**

**Advisors: Michael Boudreau
Pamela Demeulenaere**

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**INCREASING COMPETITIVE ACTIONS: A FOCUS ON
TECHNICAL DATA RIGHTS ASSOCIATED WITH NON-
COMMERCIAL HARDWARE ITEMS**

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Submitted in partial fulfillment of the requirements for the degree of

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from the

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INCREASING COMPETITIVE ACTIONS: A FOCUS ON TECHNICAL DATA RIGHTS ASSOCIATED WITH NON- COMMERCIAL HARDWARE ITEMS

ABSTRACT

This project reviewed the key laws and the Department of Defense's (DOD's) current policies pertaining to competition and the acquisition of technical data rights, as they apply to non-commercial hardware items. Competition data from the *U.S. Army TACOM Life Cycle Management Command FY12 Annual Competition Report* (ACC-WRN report), along with several sole source justifications and approvals (J&As), were then reviewed to determine if the government's lack of technical data rights impacted the buying command's ability to competitively acquire non-commercial hardware items.

After reviewing the "top ten" dollar value, non-competed contract actions awarded by the Army Contracting Command–Warren (ACC-WRN) site in fiscal year 2012 (FY12), it was determined that lack of technical data rights was cited as a key reason that 70 percent of those contracts could not be competed. The total dollar value for all related FY 12 sole source contracts at TACOM was \$1.21 billion (bn). The total dollar value for the top ten sole source contracts that were looked at was \$765 million, which is 63 percent of the total \$1.21bn awarded. The high percentages of 70 percent and 63 percent, respectively, show that a lack of technical data is a barrier to competition for TACOM and contributed to a high percentage of the total non-competed actions at the ACC-WRN site in FY12. In the three J&As that did not list a lack of technical data as a key reason for awarding a sole source contract, an "unusual and compelling urgency" was cited as the authority for contracting without providing for full and open competition.

Based on the present project's findings, several recommendations are made to improve the state of competition within the DOD. Some of the recommendations include offering incentives to contractor and government personnel, creating commodity-specific competition goals, and analyzing business case analyses associated with major defense programs to assess the thoroughness, accuracy, and uniformity of the information provided.

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LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|------------|---|
| ACC-WRN | Army Contracting Command-Warren |
| BCAs | business case analyses |
| BBP | Better Buying Power |
| CA | competition advocate |
| CICA | Competition in Contracting Act |
| CMO | Competition Management Office |
| DAS | Defense Acquisition System |
| DMS | Data management strategy |
| DOD | Department of Defense |
| DODD | Department of Defense Directive |
| DODI | Department of Defense Instruction |
| FAR | Federal Acquisition Regulation |
| FPDS-NG | Federal Procurement Data System—Next Generation |
| DFARS | Defense Federal Acquisition Regulation Supplement |
| GAO | Government Accountability Office |
| GPE | government point of entry |
| OEMs | original equipment manufacturers |
| PEO | Program Executive Officer/Program Executive Office |
| PM | Program manager/Program Management Office |
| TACOM LCMC | Tank-automotive and Armaments Command—Life Cycle Management Command |
| TDP | Technical Data Package |
| TDS | Technical data rights strategy |

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I. INTRODUCTION

A. PURPOSE

This project will present and review key laws and the Department of Defense's (DOD) current policies pertaining to competition and the acquisition of technical data rights, as it applies to non-commercial hardware items. In particular, this project will concentrate on reviewing the policies applicable to contracting professionals and program managers responsible for managing and implementing strategies associated with a major defense acquisition program. This project will also establish some of the mandatory actions that federal acquisition professionals must take when buying goods and services to establish context for the reader.

In addition to conducting the literature review discussed in the paragraph above, this project will review 2012 justification and approvals (J&As) processed by the Army Contracting Command—Warren (ACC-WRN). A sampling of these documents will be reviewed to identify the reason why each contracting action was permitted to be fulfilled on a sole source basis in lieu of being competitively acquired. Overall, the purpose of this review is to determine if the government's lack of technical data rights is impacting the DOD's ability to competitively acquire non-commercial hardware items.

The key sources of information used to complete this project include: several Government Accountability Office (GAO) reports pertaining to competition and technical data rights, the Competition in Contracting Act (CICA), Title 10 U.S.C 2320 and 2321, sections of the Department of Defense Directive (DODD) 5000.01 and Department of Defense Instruction (DODI) 5000.02, sections of the Federal Acquisition Regulation (FAR) and Defense Federal Acquisition Regulation Supplement (DFARS), data from an ACC-WRN annual competition report, and information from J&As applicable to the contracts sampled in this project.

B. BACKGROUND

The government's practice of acquiring goods and services on a competitive basis is not a new requirement. In fact, according to a report entitled *Competition in Federal Contracting: An Overview of the Legal Requirements*, Kate M. Manuel (2011) states:

The federal government has promoted competition between offerors seeking to meet its needs since at least 1781, when the Superintendent of Finance advertised in a local newspaper for proposals from potential suppliers of food for federal employees in Philadelphia. (p. 2)

Therefore, since at least 1781, the government has been committed to a practice of competitively acquiring goods and services. This practice has since been codified, changed, and continuously implemented through legislation, regulation, guides, manuals, and other forms of official documentation.

However, despite the fact the government has an established practice and policies requiring its acquisition professionals to competitively acquire goods and services, sources such as the GAO have consistently identified in reports that the DOD could improve its ability to increase competition. In GAO report 10-833, entitled *Federal Contracting: Opportunities Exist to Increase Competition and Assess Reasons When Only One Offer Is Received* (Government Accountability Office, 2010), the GAO specifically identifies the DOD's lack of access to technical data rights as a primary factor affecting its ability to competitively acquire items through the contracting process. This GAO finding seems to have been accepted by the DOD, considering the fact that the DOD's own Better Buying Power (BBP) campaign includes a requirement for all program managers to develop open systems architectures and set rules for the acquisition of technical data rights. Specifically, Carter (2010) states:

At Milestone B I will require that a business case analysis be conducted in concert with the engineering trade analysis that would outline an approach for using open systems architectures and acquiring technical data rights to ensure sustained consideration of competition in the acquisition of weapon systems. A successful example of the strategic use of open architecture and buying of appropriate technical data rights is the Navy's Virginia-class SSN program. The Virginia program uses a modular open systems architecture and selective sub-component technical data rights procurement that promotes a robust competition at the component supplier

level, while still supporting continual and effective block upgrades to the existing systems that reduce the overall life cycle cost of the system.
(p. 10)

Overall, the above requirement established by Dr. Ashton Carter, the former USD(AT&L), serves as evidence that the DOD agrees with the GAOs conclusions, and is trying to implement process improvements pertaining to technical data strategies that will improve its ability to execute more competitively sourced contracts in the future.

C. METHODOLOGY

The methodology behind this project is twofold. First, several key pieces of information will be reviewed in order to relate the necessary background information for the reader. The background information presented in Chapters II and III will provide the reader with both a historical and current day perspective of the laws and policies associated with the topics presented in this project. The literature that was reviewed to complete this project generally consisted of previously issued laws, regulations, guides, manuals, and GAO reports.

In order to address this project's research questions, contract data was extracted from the *U.S. Army TACOM Life Cycle Management Command FY12 Annual Competition Report* (ACC-WRN report). The data was not explicitly included in the ACC-WRN report, but it contained the raw information used by the command to prepare its annual competition report. From this data set, target contract actions were identified in accordance with the scope and limitation of this project. Once target actions were identified, read only access to the contract files was given by the ACC-WRN, and the relevant J&A documents were harvested in order to analyze the basis for pursuing an exception to competition. In addition, the ACC-WRN report was used to assess what type of local level competitive buying initiatives were promoted by the command.

D. SCOPE AND LIMITATION

As previously discussed, this project will review key acquisition laws and current DOD policies as they pertain to competition requirements and technical data rights associated with non-commercial hardware items procured by major defense acquisition

programs. This project will only focus on the technique of acquiring technical data rights as a means for creating competition. Therefore, it will not delve into the other techniques that are available to the government to obtain competition (e.g., form, fit, and function specifications, directed licensing, competitive copying). The scope of this project was limited to the technique of purchasing technical data rights by the government, primarily because it is the technique that has been specifically promoted by the BBP initiatives.

As it relates to the data analysis portion of this project, the data used is limited to 2012 contracting information that was generated and stored by the Army Contracting Command—Warren. Within this bank of contracting files, only approved J&As will be utilized to determine whether-or-not the lack of access to technical data caused the buying command to pursue sole source contracting procedures. Also, the number of J&As reviewed will be limited to the to the top ten ACC-WRN sole source actions made in 2012 with the highest associated dollar value, made on behalf of the programs of record located at the U.S. Army Tank-automotive and Armaments Command (TACOM) Life Cycle Management Command (LCMC). The purpose of limiting our review to just 2012 redacted J&As is a matter of practicality (i.e., maintaining a manageable scope to this project), and it mitigates the chances of exposing sensitive information.

E. RESEARCH QUESTIONS

The two primary research questions addressed in this study are the following:

- Does the government's lack of technical data rights associated with hardware items, significantly impact DOD's ability to competitively acquire non-commercial items?
- Are there obvious changes that can be made to key statutes, regulations or other policies pertaining to technical data acquisition that would likely increase DOD's ability to competitively acquire non-commercial items?

Subsidiary research questions include:

- What are the major laws, orders, guidance, and regulations that establish the government's preference to buy items on a competitive basis?
- What are the rationale and motives for establishing a system that emphasizes competitive contracting procedures?
- What are some of the government's current recommendations to increase its ability to procure items on a competitive basis?

- What type of programs is the TACOM LCMC employing to affect competition?

F. ORGANIZATION BY CHAPTER

Chapter II provides a background of the government's history of acquiring items on a competitive basis, and identifies the current laws and regulations that influence the government's contracting process. In particular, the general requirements of the Competition in Contracting Act (CICA) of 1984 and specific portions of the Federal Acquisition Regulation (FAR) will be reviewed, as they pertain to competition. Ultimately, this chapter will allow the reader to consider some fundamental principles that all government acquisition professionals must abide by and promote when it comes to the acquisition of supplies or services. It will also establish who within the acquisition workforce is largely responsible for establishing, executing and sustaining competitive acquisition strategies. Altogether, this information will allow the reader to understand both DOD's history and current policy requirements applicable to competition in contracting.

Chapter III will examine the DOD's competition and technical data rights-related problems. This will be accomplished by summarizing the findings of several GAO reports, and discussing recent initiatives pursued by the DOD to establish effective long term competition strategies through the use of technical data rights and open architectures. This chapter will then outline some fundamental information that will help the reader understand the following: the definition of technical data, the definition of technical data rights, the key laws and regulations that govern technical data rights, who is responsible for establishing long term data right strategies, and at what point in the life cycle is it critical to establish the DOD's rights. Ultimately, the information presented in this chapter will clarify for the reader to the DOD's past and current policies, as they apply to technical data rights.

Chapter IV will provide some general background information pertaining to the ACC-WRN. This portion of the project will assist the reader to understand the ACC-WRN mission in terms of description and magnitude based on the range of DOD items it procures. Furthermore, this chapter will identify the Army Acquisition Programs that the

ACC-WRN supports. After this introductory information is given, statistical information from the ACC-WRN report presented, and then detailed information will be given about the particular contract file reviews that were conducted to execute this project. The information presented in this chapter will serve as the basis for the conclusions and recommendations drawn, which will be presented in Chapter V.

As stated above, Chapter V will present the conclusions and recommendations, based on all of the information utilized to execute this project. This chapter will also provide the answers to the research questions presented in Chapter I, present some recommendations for further research, and present some competition initiatives the DOD may want to implement at the local level.

G. BENEFITS OF STUDY

This project will identify and explore the key statutory and regulatory policies governing both competition and technical data rights, as they apply to the noncommercial hardware items. From this information, the reader will develop a working level knowledge on the subject, to include a fundamental understanding of definitions, processes, and roles and responsibilities of the government acquisition personnel.

In addition this project will help to determine whether-or-not one of the Army's largest life cycle management command's ability to use competitive contracting procedures was hindered in 2012 by its lack of access to technical data rights. Furthermore, the ACC-WRN report will be used to determine what incentive programs and techniques to generate competition are being employed by the command. These findings will be brought to light, primarily to build awareness among the acquisition professionals who read this project.

II. COMPETITION IN CONTRACTING

A. INTRODUCTION

As discussed in Chapter I, the practice of acquiring goods and services on a competitive basis can be traced back to 1781. However, it was not until 1809 that Congress passed the first law requiring competition in federal procurement contracting. Congress has since passed several statutes further affecting competition in the federal acquisition process. As documented in her report, *Competition in Federal Contracting: An Overview of the Legal Requirements*, Kate M. Manuel (2011) provided the following timeline and description of the key statutes, policies, and recommendations from Congress affecting competition over the years:

- **1809:** Congress passes the first law requiring competition in Federal procurement contracting. This law established what came to be known as “formal advertising” as the preferred method for Federal procurements by specifying that “all purchases and contracts for supplies or services ... shall be made by open purchases, or by previously advertising for proposals.” (2 Stat. 536 (1809)).
- **1861:** Congress reaffirms its commitment to formal advertising by passing a statute stating that “all purchases and contracts for supplies and services, ... except for personal services, ... shall be made by advertising a sufficient time previously for proposals respecting the same” unless immediate delivery is required due to “public exigencies.” (12 Stat. 220 (1861)).
- **1914–1918:** The War Industries Board authorizes negotiated procurements, or procurements involving bargaining with the offerors after receipt of proposals. Such procurements are classified as noncompetitive.
- **1930:** The War Policies Commission recommends that formal advertising be replaced by negotiated procurement during times of war. Congress does not enact this proposed change, but does recognize additional exceptions allowing use of negotiated procurement instead of formal advertising.
- **1939–1945:** In December 1941, Congress passes the First War Powers Act, which authorizes the President to grant agencies that are “involved in the war” authority to enter into contracts “without regard to the provision of law relating to the making, performance, amendment, or modifications of contracts.” (55 Stat. 838 (1941)). Later in the war, the War Production Board prohibits agencies from using formal advertising without specific authorization to do so.

- **1945:** A task force of the Procurement Policy Board, consisting of officers from the Federal procuring agencies, recommends relaxing competition requirements to support the growth and sustainability of the industrial base.
- **1947:** Congress passes the Armed Services Procurement Act (ASPA), which generally requires use of formal advertising but allows use of negotiated procurements when any of seventeen exceptions apply. These exceptions address things such as medicines or medical property; property purchased for authorized resale; perishable or nonperishable subsistence supplies; and property or services for which it is impracticable to secure competition. ASPA only applies to the procurement contracts of defense agencies.
- **1949:** Congress passes the Federal Property and Administrative Services Act (FPASA), subjecting civilian agencies to requirements like those in ASPA. FPASA recognizes fifteen exceptions to formal advertising.
- **1982:** Senators William V. Roth, Jr., Carl Levin, and William S. Cohen first introduce the Competition in Contracting Act (CICA) (S. 2127). Increased competition in contracting is also among the “Carlucci Initiatives,” 32 steps for reforming defense acquisitions announced by then Deputy Secretary of Defense Frank Carlucci.
- **1984:** Congress passes CICA, requiring agencies to obtain “full and open competition through the use of competitive procedures” in their procurement activities unless otherwise authorized by law.
- **1990–1991:** Military agencies experience difficulties in procuring commercial items for use during the Gulf War. In one high-profile incident, the Air Force’s attempt to purchase \$10 million worth of commercially available mobile radios for the troops falls through because the supplier, Motorola, is not used to dealing with the Government and does not have a Government-approved cost-accounting program in place to justify its price. Motorola sells the radios to Japan, which gives them to the Air Force.
- **1994:** Congress passes the Federal Acquisition Streamlining Act (FASA), which establishes a “preference” for the acquisition of commercial items in meeting agencies’ procurement needs. FASA also articulates competition requirements for task order and delivery order (TO/DO) contracts.
- **1996:** Congress passes the Federal Acquisition Reform Act (FARA), which requires that agencies “obtain full and open competition ... in a manner that is consistent with the need to efficiently fulfill the Government’s requirements.” FARA also relaxes the rules imposed on agencies’ purchases of commercial items.

- **2003:** Congress passes the Services Acquisition Reform Act (SARA). SARA further relaxes the rules imposed upon procurement of commercial services.
- **2008:** Section 843 of the National Defense Authorization Act for FY2008 limits the use of single-award task order/delivery order (TO/DO) contracts in excess of \$100 million; grants GAO temporary jurisdiction over protests involving orders of \$10 million or more; and specifies what constitutes a “fair opportunity to be considered” for orders in excess of \$5 million.
- **2009:** On March 4, 2009, President Barack Obama issued a memorandum to all contracting personnel reminding them of their overall obligation to the American taxpayer. In his memorandum, the President specifically stated that, “Since 2001, spending on Government contracts has more than doubled, reaching over \$500 billion in 2008. During this same period, there has been a significant increase in the dollars awarded without full and open competition and an increase in the dollars obligated through cost-reimbursement contracts. Between fiscal years 2000 and 2008, for example, dollars obligated under cost-reimbursement contracts nearly doubled, from \$71 billion in 2000 to \$135 billion in 2008. Reversing these trends away from full and open competition and toward cost-reimbursement contracts could result in savings of billions of dollars each year for the American taxpayer. (Manuel, 2011, pp. 4–5)

The purpose of providing the summary above is to establish the fact that Congress has a longstanding history of promoting the use of competitive contracting procedures, but it also seems to relax this policy during wartime. However, today the president is promoting a policy of maximum competition utilization, even during wartime. Therefore, the topic is a very serious matter for the DOD to address, because it may be impossible for it to achieve the president’s objectives at time of war, unless current facets of the law and regulations change. Thus, the remaining portions of this chapter will discuss the requirements of some key government policies pertaining to competition, and the analysis performed will determine whether or not the acquisition or access to technical data is lost during wartime.

B. THE COMPETITION IN CONTRACTING ACT

Out of the laws outlined in paragraph A. above, this project focuses on the Competition in Contracting Act (CICA) of 1984 because it causes agencies to obtain full

and open competition through the use of competitive procedures unless an exception is otherwise authorized by law. CICA goes further by enumerating the specific rules for requiring agencies to obtain full and open competition. The requirements of this law are still intact today, and are promoted by DOD leadership as method for capitalizing on the potential cost savings commonly realized through competitive acquisitions. This campaign is evidenced by the BBP initiatives. No matter, CICA is the preeminent law governing competition and it was codified into United States Code Annotated, Title 10, Subtitle A, Part IV, Chapter 137, Section 2304. The shortened name of the codified law is 10 U.S.C §2304, which is the current version as it stands today and is clearly reflected in DOD policy.

As discussed above, CICA requires contracting officers to promote and provide for full and open competition when soliciting offers and awarding contracts (10 U.S.C §2304) using contract methods to include sealed bids, competitive proposals, and other methods (such as described in Manuel's (2011) *Competition in Federal Contracting: An Overview*). However, when an exception to competition is utilized, the contracting officer must justify the reason in writing prior to commencing negotiations. The contracting officer documents the authority to issue a sole source contract in a J&A, which per CICA must be approved by the appropriate official (dependent on the dollar amount of the contract) and needs to be based on one of the following seven statutory authorities:

- There is only one responsible source and no other supplier or services will satisfy agency requirements.
- There is an unusual and compelling urgency.
- Industrial mobilization or an engineering, development, and research capability is needed, or expert services are required.
- An international agreement or treaty is involved.
- A specific statute authorizes or requires the use of noncompetitive acquisition procedures.
- National security could be compromised.
- It is not in the public's interest regarding the particular acquisition concerned.

In addition to meeting one or more of the exceptions presented above, the J&A must contain sufficient facts and rationale to justify the use of the stated exception. Per FAR Subsection 6.303–2, most justifications must include the following information: a description of the agency’s needs, a determination that the anticipated cost will be fair and reasonable, a description of the market survey conducted or a statement of the reasons a market survey was not conducted, a listing of the sources (if any) that expressed in writing an interest in the procurement, and a statement of the actions (if any) the agency may take to remove or overcome any barrier to competition before a subsequent procurement for such needs. The accuracy and the completeness of the justification is ultimately concurred on by the contracting officer.

C. THE DEFENSE ACQUISITION SYSTEM–DODD DIRECTIVE 5000.01

The Defense Acquisition System (DAS) describes the management process the Department of Defense uses to provide effective, affordable, and timely systems to the users. DODD 5000.01 lays out specific policies and applies to all acquisition programs. An Acquisition Program is defined as a “directed, funded effort that provides a new, improved, or continuing materiel, weapon or information system, or service capability in response to an approved need” (Department of Defense, 2007, Section 3.2). The primary objective of defense acquisition is “to acquire quality products that satisfy user needs with measurable improvements to mission capability and operational support, in a timely manner, and at a fair and reasonable price” (Department of Defense, 2007, Section 4.2).

Within the DAS, the program manager (PM) is the designated individual who has been given the responsibility and authority to accomplish program objectives for the development, production, and sustainment of material required to meet the user’s operational needs. Section 4 of DODD 5000.01 discusses many of the roles of a PM; however, two of his or her core responsibilities include the management of programs consistent with statutory and regulatory requirements and the need to establish program goals for the minimum number of cost, schedule, and performance parameters that describe the program over its life cycle. As the single point of accountability for accomplishing program objectives for total life-cycle systems management, including

sustainment, the DODD 5000.01 prescribes PMs to take a total systems approach when managing a program. The guidance further states that “the PM shall apply human systems integration to optimize total system performance (hardware, software, and human), operational effectiveness, and suitability, survivability, safety, and affordability” (Department of Defense, 2007, Section E1.1.29) and that “PMs shall consider supportability, life cycle costs, performance, and schedule comparable in making program decisions” (Department of Defense, 2007, Section E1.1.29). In addition, the directive discusses that planning for operation and support and the estimation of total ownership costs shall begin as early as possible, and that supportability is a key component of performance, and needs to be considered throughout the system life cycle (Department of Defense, 2007)

Additional policy is established in the DODD 5000.01 in regards to competition, discussing how competition can provide major incentives to industry and government organizations to innovate, reduce cost, and increase quality. Guidance is given, which states that all of the DOD components “shall acquire systems, subsystems, equipment, supplies, and services in accordance with the statutory requirements for competition” (Department of Defense, 2007, Section E1.1.3). The policy on competition further states how acquisition managers should take all necessary actions to promote a competitive environment. Some examples of these actions are to include the consideration of alternative systems to meet stated mission needs, structuring acquisition strategies to ensure the availability of competitive suppliers throughout a program’s life, ensuring that prime contractors foster effective competition for major and critical products and technologies; and ensuring that qualified international sources are permitted to compete. If competition is not available, PMs are directed to consider alternatives that will yield the benefits of competition (Department of Defense, 2007).

Especially relevant to today’s operating environment, the DODD 5000.01 discusses how all participants in the acquisition system should recognize the reality of fiscal constraints. Cost should be viewed as an independent variable, and programs planned based on realistic projections of the dollars and manpower likely to be available in future years. More guidance is given in the area of a program’s projected cost.

Specifically, the major cost drivers of a program's projected overall life cycle cost should be identified early on so they can be managed from the onset of the program. In addition, the directive states that the user should address affordability in establishing capability needs (Department of Defense, 2007).

D. THE FEDERAL ACQUISITION REGULATION

The FAR is the primary regulation that establishes guidelines for federal executive agencies in the acquisition of supplies and services with appropriated funds. The FAR is the DOD's primary method for implementing all laws, executive orders, and other directives into the acquisition process. It became effective on April 1, 1984, and was issued within applicable laws under several joint authorities of the government. The FAR provides for coordination, simplicity, and uniformity in the federal acquisition process.

As defined in the FAR, "Full and open competition," when used with respect to a contract action, means that all responsible sources are permitted to compete. Furthermore, "effective competition" is defined as a market condition that exists when two or more contractors, acting independently, actively contend for the government's business in a manner that ensures that the government will be offered the lowest cost or price alternative or best technical design meeting its minimum needs (FAR Section 34.001).

Per FAR Section 1.102, promoting competition can help satisfy the customer in terms of cost, quality, and timeliness of the delivered product or service. The primary customers for the product or service are considered to be the end users (i.e., Soldiers) and program managers, who are operating and acting on behalf of the American taxpayer. This section of the FAR is important because it essentially reiterates the requirements of CICA by stating the policy of the federal government is to promote competition throughout the acquisition process, however, there are many other examples of requirements in the FAR that also seek to enact the intent of CICA. A small selection of such requirements is provided below to help the reader better understand some of the regulatory requirements that exist in order to further effect competition.

1. Exceptions for Allowing other than Full and Open Competition

As previously discussed in this chapter, CICA allows contracting officers to use procedures other than full and open competition, however, in order to do so contracting professionals must obtain authority in accordance with the requirements established in FAR Subpart 6.3. Authorization to deviate from the use of competitive procedures must be provided for in a J&A, which is a document that includes all the facts needed to support the proposed exception to competition. Such facts commonly presented in a J&A include a discussion on the availability of a technical data package (TDP) or the government's access to data rights, specifications, engineering descriptions, statements of work, or if purchase descriptions suitable for full and open competition have not been developed or are not available. In addition, the prescribed content of a J&A requires the preparer to address the market research conducted and actions taken to obtain competition. Overall, these documents are quite extensive, and require the contracting and acquisition professionals responsible for completing the document to provide thorough rationale for justifying the use of other than competitive procedures.

2. Publicizing Proposed and Tracking Contract Actions

Another competition-promoting requirement that agencies must satisfy is to publicize all proposed contracting actions using a single government-wide point of entry (GPE), which is located at fedbizopps.gov. This requirement, which must be satisfied by contracting officers, is established in FAR Section 5.002, and it states that the government-wide Point of Entry is "the single point where government business opportunities greater than \$25,000, including synopses of proposed contract actions, solicitations, and associated information, can be accessed electronically by the public." In addition to publicizing these types of notices, procuring agencies also use fedbizopps.gov to publicize qualification requirements for systems if active competition on anticipated future requirements is likely to be fewer than two manufacturers. However, contracting officers are not required to publicize the qualification requirements if they determine that doing so could compromise national security (FAR Section 9.204). Regardless, as explained in FAR Part 5, one of the primary points for publicizing this

type of information is to facilitate competition and participation from industry, both at the prime and subcontractor or supplier levels (FAR Section 5.206).

3. The Competition Advocate

As required by Section 20 of the Office of Federal Procurement Policy Act, the head of each executive agency shall designate a competition advocate (CA) for the agency and for each procuring activity of the agency (FAR Section 6.501). Competition advocates are responsible for promoting full and open competition, and they generally accomplish their mission by utilizing the following methods: challenging requirements that are not stated in terms of functions to be performed, questioning the performance required or essential physical characteristics of an item, and helping to eliminate barriers to full and open competition caused by restrictive statements of work, unnecessarily detailed specifications, and unnecessarily burdensome contract clauses. Competition advocates must review the contracting operations of the agency and report to senior procurement executives any recent opportunities or actions taken to help meet the preceding responsibilities. Another key requirement the competition advocate must perform includes preparing and submitting an annual report to senior procurement executives of the agency. This report describes any new initiatives taken by the entity to increase competition, addresses other ways in which the agency has emphasized the acquisition of commercial items and competition in areas such as acquisition training and research, and includes recommended competition goals and plans for increasing competition in the upcoming fiscal year. Lastly, the report discusses ways to promote personal and organizational accountability, as they pertain to increasing competition. Personal and organizational accountability could include the use of recognition and awards to motivate program managers, contracting officers, and others in authority to promote competition in acquisition (FAR Section 6.502).

4. Acquisition Planning

Agencies must perform acquisition planning and conduct market research prior to executing a contract action. This requirement helps the acquisition team assess the overall market in relation to the item being bought. If conducted properly, this exercise provides

a significant amount of information back to the acquisition team, which heavily influences its prospective contracting strategy. One critical question the results of market research should answer is whether-or-not the item can be acquired competitively. In fact, FAR Part 7 says market research must be taken to obtain competition to the maximum extent practicable (FAR Section 7.102), and that the head of the agency needs to ensure acquisition planners address the requirement to specify needs, develop specifications, and to solicit offers in a way that helps promote and provide for full and open competition (FAR Section 7.103). Furthermore, Section 7.104 of the FAR also discusses “how” the acquisition planning team should consult with requirements and logistics personnel to determine type, quality, quantity, and delivery requirements. It also says the team should avoid issuing those requirements on an urgent basis or with unrealistic delivery or performance schedules because these factors generally restrict competition and cause prices to increase.

In regards to the product these teams must create, DFARS Subsection 207.103(d)(i)(B) states that an acquisition plan must be created and approved by the Agency-head for all production or services involving contract actions over \$50 million for all years or \$25 million for any one fiscal year. This plan, similar to some of the information presented in a J&A, must describe how competition will be sought, promoted, and sustained throughout the course of the acquisition. In accordance with FAR Section 7.105, if full and open competition is not contemplated, the authority in FAR Section 6.302 must be cited as well as the basis for the application of the authority, sources must be identified, and the reasons why full and open competition cannot be obtained must be discussed. In addition, the plan must also identify all major components and subsystems and describe how competition can be promoted for them. A focus also must be placed on how competition will be sought on the spares and repair parts of systems. In this area, key logistics milestones should be established, such as technical data delivery schedules and acquisition method coding conferences that affect competition.

Acquisition plans also need to address whether or not subcontract competition is feasible and desirable and how it will be sought, promoted, and sustained throughout the

course of the acquisition. Any known barriers to subcontract competition must also be identified as well as ways to overcome them (ref. FAR Section 7.105). Contractors are required to select subcontractors and suppliers on a competitive basis to the maximum extent practical consistent with the objectives and requirements of the contract. Exceptions, however, are granted in this area if the contractor is an approved mentor under the Department of Defense Pilot Mentor-Protégé Program (Pub. L. 101–510, section 831 as amended). In this case, a contractor may award subcontracts on a noncompetitive basis to its protégés (FAR Subsection 52.244–5).

5. Additional Requirements for Major Systems

In addition to the standard considerations given to competition in the FAR, additional considerations are paid in respect to a major system. Per FAR Section 2.101, a major system is an item that consists of a combination of elements that will function together to produce the capabilities required to fulfill a mission need, and further defined as system for which the DOD is responsible and the total expenditures for research, development, test, and evaluation for the system are estimated to be more than \$189.5 million or the eventual total expenditure for the acquisition exceeds \$890 million. An example of a special consideration paid to major weapon systems is found in FAR Section 7.106, where it encourages acquisition teams to require potential offerors to include in their proposals ways to incorporate items that the government will be able to acquire competitively if they are likely to be needed in substantial quantities throughout the system's service life. Contractors may then propose to the government the right to use technical data to be provided under the contract for competitive future acquisitions along with the associated cost for acquiring such data. In addition, proposals may include ways to achieve the qualification or development of multiple sources of supply for competitive future acquisitions (FAR Section 7.106). For major systems acquisition, the contracting officer shall require the delivery of any technical data relating to the major system that is developed exclusively with government funding, but only if the delivery of the technical data is needed to ensure the competitive acquisition of supplies or services that will be required in substantial quantities in the future (FAR Subsection 27.406–3).

Also, other policies designed to ensure agencies acquire major systems in the most effective, economical, and timely manner are given in FAR Section 34.002. This section states that agencies acquiring major systems should promote innovation and full and open competition (as required by FAR Part 6) in the development of major system concepts. This can be accomplished by expressing agency needs and major system acquisition program objectives in terms of the agency's mission and not in terms of specified systems to satisfy needs, and by focusing agency resources and special management attention on activities conducted in the initial stage of major programs. Further guidance is given in FAR Subsection 34.005-1 where it states that the program manager shall promote full and open competition and sustain effective competition between alternative major system concepts and sources throughout the acquisition process, as long as it is economically beneficial and practicable to do so, and the notice of any proposed acquisition shall be given the broadest and most effective circulation practicable throughout the business, academic, and government communities.

E. SUMMARY

As one can clearly ascertain from the information presented in this chapter, the government has a history of procuring items and services on a competitive basis. It is also clear that Congress has enacted many laws that deal with competition in contracting; however, CICA is considered the most significant law because it made competition the required method of procurement (absent an approved exception). While the government does deserve some credit for increasing competitive spending overall, it still spends a significant amount of money on a noncompetitive basis (Obama, 2009).

Therefore, in the upcoming chapters we will explore the topic of technical data in relation to competition. TACOM's 2012 competition data will also be analyzed to determine if the government's lack of access to technical data significantly impacted its competition goals. Lastly, recommendations to increase the government's ability to acquire technical data right will be given.

III. TECHNICAL DATA RIGHTS

A. INTRODUCTION

As introduced in Chapter I of this project, the DOD acquisition community received guidance from Dr. Ashton B. Carter, the former USD(AT&L) on June 28, 2010. This guidance introduced a government initiative called the Better Buying Power (BBP) Program, which promotes ways to increase efficiencies within the federal acquisition process. The BBP as introduced by Dr. Carter originally consisted of forty separate initiatives. Then, on November 13, 2012, Mr. Frank Kendall, the current USD(AT&L), issued a letter which grouped the initiatives into seven focus areas. Within these focus areas, one of the principles required acquisition personnel to promote effective competition by “enforcing (sic) open system architectures and effectively managing technical data rights” (Kendall, 2012). Therefore, this chapter will illustrate the DOD’s apparent problems associated with technical data rights. It will also provide definitions related to commonly used technical data rights terminology, examine the preeminent DOD technical data statute, and examine the DOD’s technical data policy and standard contract clauses.

B. DOD’S REPORTED PROBLEMS WITH DATA RIGHTS

Even though the DOD has established policies on competition in contracting and technical data, the fact remains that the DOD continues to struggle with the effective acquisition and management of technical data rights, which has negatively impacted its competitive spending rates. This has created a barrier to DOD’s ability to affect the levels of competitive spending it desires, as presented in President Obama’s 2009 memorandum and the BBP initiatives. This barrier is significant and is supported by the findings of several GAO audits conducted on the matter. To further illustrate this problem, some of the findings and concluding statements from recent GAO reports are provided below:

1. GAO report 06–839, entitled *Strengthen Policies for Assessing Technical Data Needs to Support Weapon Systems* (Findings are directly quoted, in a through c, below.)

a. DOD acquisition policies do not specifically address long-term needs for technical data rights to sustain weapon systems over their life cycle, and in absence of a DOD-wide policy, the Army and the Air Force are working independently to develop structured approaches for defining technical data requirements and securing rights to those data.

b. DOD acquisition policies do not specifically require program managers to assess long-term needs for technical data rights or develop corresponding acquisition strategies. Army and Air Force are working to develop structured approaches for assessing technical data needs and securing long-term rights to those data.

c. Under current DOD acquisition policies, the military services lack assurance that they will have the technical data rights needed to sustain weapon systems throughout their life cycle. We have previously made recommendations that DOD enhance its policies regarding technical data. DOD has concurred with these recommendations but has not implemented them.

2. GAO report 10–833, entitled *Opportunities Exist to Increase Competition and Assess Reasons When Only One Offer Is Received* (Findings are directly quoted, in a through f, below.)

a. For 42 of 74 contracts-or 57 percent of the noncompetitive contracts in our sample, agencies determined, under FAR Subpart 6.3, that only one responsible contractor could meet the agency’s requirements.

b. For services supporting DOD weapons programs, the government’s lack of access to proprietary technical data and a heavy reliance on specific contractors for expertise limit, or even preclude the possibility of, competition.

c. For 27 of the 47 noncompetitive DOD contracts we reviewed, the government was unable to compete requirements due to a lack of access to proprietary technical data. This situation, combined with a heavy reliance on certain contractors’ expertise built over years of experience, inhibits competition. Most of the contracting and program officials at DOD that we spoke with pointed to the lack of access to technical data as one of the main barriers to competition. Some contracting officers described this condition as essentially being “stuck” with a certain contractor.

d. Several officials tout that the situation the government is currently experiencing is a result of decisions made years ago, when first acquiring a weapon system, to not purchase critical technical data packages for reasons that include budgetary constraints or a push toward streamlined contracting processes by purchasing commercial items.

e. Even when technical data are not an issue, the government may have little choice other than to rely on the contractors that were the original equipment manufacturers, and who, in some cases, designed and developed the weapon system. A few contracting and program officials we spoke with noted that for some DOD programs, the government is so reliant on the contractor that it is difficult for the government to even make decisions or set requirements anymore.

f. Program offices can influence levels of competition through their roles in the acquisition planning process, in particular by having sufficient knowledge of the contract award process and providing contracting officials with enough time to compete requirements. However, in their competition reports, some agencies in our review pointed to a lack of acquisition planning, and the role that the program office plays in it, as a barrier to competition.

3. GAO report 11-469, entitled *DOD Should Clarify Requirements for Assessing and Documenting Technical-Data Needs* (Findings are directly quoted, in a through f, below.)

a. DOD took a series of actions to change its acquisition and procurement policies in a manner that reflects the language of the 2007 act and our 2006 recommendations. As a result of these changes, program managers are now required to record their long-term technical data needs in two key acquisition program documents: the acquisition strategy and acquisition plan.

b. The documentation we reviewed for 12 acquisition programs partially addressed the revised DOD policies on long-term technical data needs.

c. As a part of our review, we did not consider the amount or level of quality of the information that the acquisition strategies and acquisition plans included in response to each requirement because DOD's policies did not specify the minimum levels or types of information that program officials are required to include to satisfy each of the four requirements.

d. OSD and each military department have issued several guides for program managers that elaborate on the requirements in DOD policy for conducting and documenting assessments of long-term technical-data needs. From December 2009 through December 2010, DOD and the military departments issued guides covering voluntary actions that program managers might take to improve their decisions related to technical data. While officials in DOD and the military departments told us that program officials have found the various DOD-wide and military department-specific guides useful, program managers are not required to follow any of the recommendations contained in the guides.

- e. OSD requires a business-case analysis for technical data decisions, but has not issued instructions on how to conduct the analysis.
- f. Previous GAO review found business case analyses were inconsistently completed.

The above list of GAO findings illustrates some of the issues behind the DOD's reported problems with competitive acquisition. However, the key finding as they pertain to this project, was made in GAO report 10-833 where they concluded 27 out of 47 noncompetitive contracts were issued because the government lacked the appropriate technical data rights to issue competitive contracts. To further validate this finding, this project will conduct an identical auditing exercise to determine on its own whether or not TACOM's 2012 competitive spending was affected in a similar manner.

C. PERTINENT TECHNICAL DATA RIGHTS DEFINITIONS

The following definitions are presented in order for one to fully understand a discussion on the DOD technical data rights policy.

- a) Technical Data according to the DOD 5010.12-M entitled Procedures for the Acquisition and Management of Technical Data (p. 11, May 1993), the definition of data "means recorded information of a technical or scientific nature. The term does not include computer or software or data incidental to contract administration such as financial or management information."
- b) Technical Data Package according to the DOD 5010.12-M (p. 11, May 1993), a Technical Data Package is described as "a technical description of an item adequate for supporting an acquisition strategy, which defines the required design configuration and procedures to ensure adequacy of item performance. It consists of all applicable technical data such as drawings, associated lists, specifications, standards, performance requirements, QA provisions, and packaging details."
- c) Technical Data Rights according to the Defense Acquisition University ACQuipedia website, data rights are considered a shorthand way to refer to the Government's license rights in two major categories of intellectual property. The two major categories consist of technical data and computer software. Within in these categories, the following level of rights exist:
- d) Unlimited Rights generally pertains to data developed exclusively at Government expense, and certain types of data (e.g., Form, Fit, and Function data [FFF]; Operation, Maintenance, Installation, and Training [OMIT]). These rights involve the right to use, modify, reproduce, display,

release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

- e) Government Purpose License Rights involves the right to use, duplicate, or disclose technical data for Government purposes only, and to have or permit others to do so for Government purposes only. Government purposes include competitive procurement, but do not include the right to permit others to use the data for commercial purposes.
- f) Limited Rights permits the Government to use proprietary technical data in whole or in part. It also means that the Government has the expressed permission of the party providing the technical data to release it, or disclose it, outside the Government.
- g) Restricted Rights generally apply to data developed exclusively at private expense.
- h) Negotiated License Rights pertains whenever the standard license arrangements are modified to the mutual agreement of the contractor and the Government. In this case, the exact terms are spelled out in a specific license agreement unique to each application.
- i) Small Business Innovative Research (SBIR) Data Rights pertains to all technical data or computer software generated under an SBIR contract. Non-Government users cannot release or disclose outside the Government, except to Government support contractors.

Commercial technical data license rights applies to technical data related to commercial items (developed at private expense) and managed in the same manner as limited rights.

1. DOD’S Technical Data Rights Policy: A History

According to Ralph C. Nash and Leonard Rawicz, the authors of the book entitled *Technical Data Rights*, the first regulatory technical data coverage appeared in 1955, in a provision entitled “Technical Data in Research Development Contracts” contained in the Armed Services Procurement Regulation (ASPR). Furthermore, Nash and Rawicz state that the provision prescribed the use of a clause entitled “Reproduction and Use of Technical Data” which reads as follows:

The Contractor agrees to and does hereby grant to the Government, to the full extent of the Contractor’s right to do so without payment of compensation to others, the right to reproduce, use, and disclose for Governmental purposes (including the right to give to foreign governments for their use as the national interest of the United States may

demand) all or any part of the reports, drawings, blueprints, data, and technical information specified to be delivered by the Contractor to the Government under this contract; provided, however, that nothing contained in this paragraph shall be deemed, directly or by implication, to grant any license under any patent now or hereafter issued or to grant any right to reproduce anything else called for by this contract. (Nash and Rawicz, 2001, p. 10)

As one can see, the DOD's initial policy pertaining to technical data rights provided no provision for protecting a contractor's proprietary information delivered under the contract. The only limitation provided by the clause pertained to the government's reproduction, use or disclosure of the data, which was to be submitted for governmental purposes only. However, according to Nash and Rawicz (p. 4, I.A.1) the government even ignored this subtle limitation by releasing data for any purpose, which benefited the government's ability to competitively acquire items. Nash and Rawicz continue to describe that this practice resulted in many contractor complaints and ultimately caused the DOD to develop a new policy in 1958, and that the new policy "attempted to encourage inventiveness and provide incentives by honoring proprietary data, limiting data requirements to that data which was necessary to satisfy the intended use, and treating contractors and subcontractors alike as to the data delivered to the Government" (p. 5, I.A.3). The DOD issued additional policies on technical data in 1964 and 1974. However, in 1984, Congress had to address the DOD's adopted policies after industry advocated a need to preserve their proprietary rights. Congress responded by passing the Defense Procurement Reform Act which specified requirements both as to technical data rights and technical data acquisition by DOD agencies (Nash & Rawicz, p. 11, I.A.6). These requirements were then codified in title 10 of the U.S. Code at sections 2302, 2305, 2320 and 2321. This project will only examine the language found in U.S.C, Title 10, 2320 since it is the section that establishes the DOD's general procurement requirements associated with technical data rights.

E. THE PRIMARY PROCUREMENT DATA STATUTE

As discussed above, Title 10 U.S.C., Section 2320 establishes the general procurement requirements associated with technical data rights, as it applies to the DOD.

Right from the onset, the language in this statute demonstrates its impact on the DOD by stating the following:

The Secretary of Defense shall prescribe regulations to define the legitimate interest of the United States and of a contractor or subcontractor in technical data pertaining to an item or process. Such regulations shall be included in regulations of the Department of Defense prescribed in the Federal Acquisition Regulation. Such regulations may not impair any right of the United States or of any contractor or subcontractor with respect to patents or copyrights or any other right in technical data otherwise established by law. Such regulations also may not impair the right of a contractor or subcontractor to receive from a third party a fee or royalty for the use of technical data pertaining to an item or process developed exclusively at private expense by the contractor or subcontractor, except as otherwise specifically provided by law.

This language is profound because 10 USC, Section 2320 specifically caused the DOD to establish regulations applicable to technical data rights, which the DOD did through the implementation of policy contained in both the FAR and DFARS. The language is also important because it establishes the government's theme of treatment to both the government and the contractor. From the paragraph shown above, one can see that the government's policy strives to protect the interest of the United States and the contractor. This language therefore caused a change to the DOD's previous policy, and introduced a balanced approach whereby the government recognizes a contractor's legitimate rights to data. The statute further implemented a method of communicating restrictions in data by allowing contractors to mark data with restricting legends. This right gave the contractor the new ability to restrict the government's right from releasing or disclosing technical data pertaining to the item or process to persons outside the government or permit the use of the technical data by such persons. 10 USC, Section 2320 further states the contractor retains this right except for data that:

- Constitutes a correction or change to data furnished by the United States;
- Relates to form, fit, or function;
- Is necessary for operation, maintenance, installation, or training (other than detailed manufacturing or process data); or
- Is otherwise publicly available or has been released or disclosed by the contractor or subcontractor without restriction on further release or disclosure.

However, notwithstanding the contractor's new found ability to restrict the disclosure of such data, the statute did allow the government to retain a sovereign limited right for disclosure, but only under certain conditions. These conditions are outlined in paragraph (a)(2)(D) of 10 USC, Section 2320, which states the "data may be released to persons outside the Government, or the Government may permit the use of technical data by such persons, if:

1. Such release, disclosure, or use—
 - a. Necessary for emergency repair and overhaul;
 - b. Necessary for the segregation of an item or process from, or the reintegration of that item or process (or a physically or functionally equivalent item or process) with, other items or processes; or
 - c. Is a release or disclosure of technical data (other than detailed manufacturing or process data) to, or use of such data by, a foreign government that is in the interest of the United States and is required for evaluation or informational purposes;
2. Such release, disclosure, or use is made subject to a prohibition that the person to whom the data is released or disclosed may not further release, disclose, or use such data; and
3. The contractor or subcontractor asserting the restriction is notified of such release, disclosure, or use."

Subsequently, the statute also discusses the rights of the parties in other situations. One situation is when an item or process is developed by a contractor or subcontractor exclusively with federal funds. In this situation, the government obtains unlimited rights to use technical data pertaining to the item or process; or release or disclose the technical data to persons outside the government or permit the use of the technical data by such persons. Another situation is when an item or process is developed in part with federal funds and in part at private expense. In this case, the statute says the parties will establish the respective rights to the item or process "as early in the acquisition process as practicable (preferably during contract negotiations)" (10 USC, Section 2320 (a)(2)(E)). No matter, in either one of these situations, the government is able to obtain the level of rights (i.e., unlimited or government purpose) needed to facilitate a competitive acquisition for the same item. All other levels of rights obtained (i.e., limited or specially

negotiated) do not allow the government to disclose the data needed when soliciting competitive offers.

F. THE DODI 5000.02: IMPLEMENTING THE STATUTE

The government implements the requirements of a law in many ways. In this particular case, some of the requirements found in 10 U.S.C., Section 2320 are addressed in the DODI 5000.02. To be specific, paragraph (e) of the statute requires:

The Secretary of Defense shall require program managers for major weapons systems and subsystems of major weapon systems to assess the long-term technical data needs of such systems and subsystems and establish corresponding acquisition strategies that provide for technical data rights needed to sustain such systems and subsystems over their life cycle. Such strategies may include the development of maintenance capabilities within the Department of Defense or competition for contracts for sustainment of such systems or subsystems. Assessments and corresponding acquisition strategies developed under this section with respect to a weapon system shall—

- (i) Be developed before issuance of a contract solicitation for the weapon system or subsystem;
- (ii) Address the merits of including a priced contract option for the future delivery of technical data that were not acquired upon initial contract award;
- (iii) Address the potential for changes in the sustainment plan over the life cycle of the weapon system or subsystem; and
- (iv) Apply to weapon systems and subsystems that are to be supported by performance-based logistics arrangements as well as to weapon systems and subsystems that are to be supported by other sustainment approaches.

To address these requirements, per Enclosure 12, paragraph 9 of the DODI 5000.02, the PM is required to “determine the data needs of the program (including external obligations) and develop a long-term strategy that integrates data requirements across all functional disciplines.” For ACAT I and II programs, PMs are required to incorporate the results of their assessment into the program’s data management strategy (DMS). Therefore, DMS should assess the data required to design, manufacture, and

sustain, as well as to support re-competition for production, sustainment, or upgrades in accordance with the PM's strategy. In addition, the DMS needs to address the merits of including a contract option for the future delivery of technical data and intellectual property rights not acquired upon initial contract award. The contractor's responsibility for verifying any assertion of restricted use and release of data should be addressed as well. Ultimately, the DMS is approved in the context of the Acquisition Strategy, which defines the acquisition, management, and rights of the data desired by the PM. Subsequently, the contents of the acquisition strategy are used as reference points during the acquisition planning and contracting phased of the acquisition cycle (DODI 5000.02).

In addition to the DMS, the DODI 5000.02 also requires the PM to produce a technical data rights strategy (TDS) prior to each milestone review. This document is also important from an acquisition strategy perspective because it must demonstrate what the PM's data acquisition strategy is, as it relates to certain acquisition objectives. As an example, the TDS is required to address what data acquisition strategies the PM will employ to "give small business the maximum practical opportunity to participate" (DODI 5000.02, Paragraph 8). In order to demonstrate this requirement, the PM would describe its data acquisition efforts, which is defined as "all activities that create, obtain, or access data from internal or external sources to satisfy data requirements driven by the data strategy (DODI 5000.02, Section 4.2.3.1.7.1). This statement is especially important to understand from a strategy perspective, because the PM may achieve its desired acquisition and sustainment outcomes without having to take ownership of the technical data at hand. In fact, the DODI 5000.02 states that "the decision to purchase data should be carefully examined...", and that the PM and chief systems engineer are responsible for working with the PM's logistic lead to establish life cycle data requirements. All of this information would be contained in the TDS.

G. THE DEFENSE FEDERAL ACQUISITION REGULATION SUPPLEMENT—IMPLEMENTING THE STATUTE

As mentioned above, the passage of 10 U.S.C. Section 2320 by Congress in 1984 caused the DOD to formally establish its technical data policy. Progress towards fulfilling the requirements of this statute began to occur in 1987 when the FAR published its policy

on technical data rights, applying to both the government and contractors in the data prepared or used by contractors during contract performance. However, while this event marked an achievement in terms of fulfilling the statute, the FAR policy recognized that DOD had to create its own policy in the DFARS in order for it to address unique technical data challenges. Subsequent to the FAR policy, the DOD satisfied the requirements of the statute and addressed its technical data nuances by publishing two DFARS policies on the matter in 1988. One policy pertained to the rights in technical data, while the other policy pertained to rights associated with computer software. These original DOD policies, although they have since been changed by revisions to the DFARS, still constitute the foundation of the DOD's policy today.

H. THE DFARS POLICY

The DOD policy pertaining to technical data rights was established and is still located in DFARS Subpart 227.71. According to DFARS Section 227.7100 (a), "This subpart prescribes policies and procedures for the acquisition of technical data and the rights to use, modify, reproduce, release, perform, display, or disclose technical data." However, for the purpose of this paper, a focus was placed specifically on DFARS Subsection 227.7103–1 which describes the policies and procedures applicable to noncommercial items or processes. As outlined in this subpart, the DOD's policy for noncommercial items consists of seven main elements. The initial element establishes DOD's overarching technical data acquisition objective which states that the DOD "is to acquire only the technical data, and the rights in that data, necessary to satisfy agency needs." This is important to note, because despite the belief of many, the DOD's policy isn't to acquire or otherwise assume ownership of all data. Instead, the DOD is to selectively acquire the data only needed to full-fill the agency's needs, which are determined by the program manager when the acquisition relates to a major weapon system program. This responsibility is established in DFARS Subsection 227.7103–2(b)(1), where it states that the program manager will determine the data needs while taking the following thoughts into consideration:

Data managers or other requirements personnel are responsible for identifying the Government's minimum needs for technical data. Data

needs must be established giving consideration to the contractor's economic interests in data pertaining to items, components, or processes that have been developed at private expense; the Government's costs to acquire, maintain, store, retrieve, and protect the data; reprourement needs; repair, maintenance and overhaul philosophies; spare and repair part considerations; and whether procurement of the items, components, or processes can be accomplished on a form, fit, or function basis. When it is anticipated that the Government will obtain unlimited or Government purpose rights in technical data that will be required for competitive spare or repair parts procurements, such data should be identified as deliverable data items. Reprourement needs may not be a sufficient reason to acquire detailed manufacturing or process data when items or components can be acquired using performance specifications, form, fit and function data, or when there are a sufficient number of alternate sources which can reasonably be expected to provide such items on a performance specification or form, fit, or function basis.

In addition to establishing the overarching acquisition objective, DFARS Subsection 227.7103-1 also prescribes important policies directly applicable to format and content of contracting documents. This policy is especially important to highlight because most of the government's rights to data are acquired as a result of contract performance. Therefore, the DOD has paid special attention to this fact by outlining in DFARS Subsection 227.7103-1(b) mandatory solicitation and contract contents. These mandatory contract requirements aim to ensure that the right data is delivered, and the appropriate data rights license is negotiated. In accordance with DFARS Subsection 227.7103-1, the mandatory solicitation and contract requirements prescribed by the DOD's policy are as follows:

- Specify the technical data to be delivered under a contract and delivery schedule for the data;
- Establish or reference procedures for determining acceptability of technical data;
- Establish separate contract line items, to the extent practicable, for the technical data to be delivered under a contract and require offerors and contractors to price separately each deliverable data item; and
- Require offerors to identify, to the extent practicable, technical data to be furnished with restrictions on the Government's rights and require contractor's to identify technical data to be delivered with such restrictions prior to delivery.

Another element of the DOD's policy worth highlighting is found in DFARS Subsection 227.7103–1(c). This entry in the policy serves to satisfy a critical element of the statute whereby no offeror shall be required to sell or relinquish its rights to data in order to be determined responsive to a solicitation or as a condition for award. It is important to note this statute requirement because the government could cause a change to its current ability to obtain data rights by simply changing this portion of the law. However, discussing the pros and cons of this change is outside the scope of this project. No matter, this portion of the DOD policy, as born from statute, assures the respect of interest in rights that all contractors normally have.

I. THE DFARS - STANDARD CONTRACT CLAUSES

There are five primary DFARS clauses that help to implement the DOD's technical data policy associated with noncommercial items or processes policy. The first clause to be discussed is DFARS Subsection 252.227–7013, Rights in Technical Data-Noncommercial Items. This clause is mandatory for use in all solicitations and contracts when the contractor will be required to deliver data to the government, pertaining to noncommercial items or processes, or commercial items for which the government will have paid a portion of the development. This clause is very important because it provides key definitions relative to technical data and establishes what types of data the rights apply. It also establishes: the period during which the government shall have rights; the fact that the government generally obtains rights previously obtained for data to be delivered under a new contract; a release of liability for any release or disclosure of technical data made in accordance with the clause; that the contractor must mark all data it restricts with the appropriate assertion markings and be prepared to provide supporting assertion data to the contracting officer during his or her evaluation, and; that the contractor shall flow down the requirements of the clauses to its subcontractors. Ultimately, this clause is perhaps the most profound technical data clause because it broadly implements the DOD's noncommercial technical data policies.

The second clause to be discussed is DFARS Subsection 252.227–7017, Identification and Assertion of Use, Release, or Disclosure Restrictions. This clause

notifies the contractor that it must identify, to the extent known at the time and offer is submitted to the government, the data to be furnished with restrictions on use, release, or disclosure. The assertions of the contractor or subcontractor's data must then be identified and provided in prescribed form on a proposal attachment.

The third clause to be discussed is DFARS Subsection 252.227-7028, Technical Data or Computer Software Previously Delivered to the Government. According to the DFARS, this clause is to be inserted in solicitations when the resulting contract will require the contractor to deliver technical data. This clause requires the offeror to identify any deliverable item that is the same or similar to an item previously delivered or to be delivered under any federal contract. By inserting this clause and requiring the contractor to respond, the contracting officer is able to ensure by the faith of the contractor that the government's pre-established rights to the data will be acquired under the prospective contract. Also, by identifying the data items, the government may be able to obtain previously delivered data from government sources in lieu of paying resubmission costs.

The fourth clause to be discussed is DFARS Subsection 252.227-7030, Technical Data-Withholding of Payment. This clause essentially establishes the government's right to withhold payment of 10 percent of the total contract price or a lesser specified contract amount if the contractor fails to deliver technical data in accordance with the terms of the contract.

The fifth clause to be discussed is DFARS Subsection 252.227-7037, Validation of Restrictive Markings on Technical Data. This clause establishes a process for the review and challenge of restrictive assertions applied to technical data by the contractor. In defense of such challenges by the government, the contractor or subcontractor is responsible at any tier for maintaining records sufficient to justify the validity of its markings. The clause also communicates that the Contracting Officer is responsible for issuing a final decision on any assertions challenge. If the Contracting Officer determines that the validity of the restrictive markings is not justified, then the contractor or subcontractor can appeal the decision to the Board of Contract Appeals or United States Claims Court.

J. SUMMARY

Overall, the subject of technical data rights is a controversial one because both the government and the contractor have an interest in technical data. The government's interest arises from the fact that it procures millions of separate materiel items from industry, and is then required to operate and sustain those items. The data proves itself useful to the government in order to maintain a level of self-sufficiency, achieve social interest goals, and to capitalize on the benefits of competitive acquisition. The contractor, on the other hand, is in business to make money and can influence its ability to earn higher degrees of profit by developing unique technologies and retaining control of the associated data. Any unauthorized or inadvertent disclosure of such trade secrets can negatively affect a contractor's future returns on investments. In this sense, the government and the contractor's motivations are at odds, which makes the matter of acquiring and enforcing data rights a challenging situation. However, until Congress changes its policy of maintaining a balanced approach, acquisition personnel must try to achieve higher levels of competition within the current policies.

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IV. DATA ANALYSIS

A. INTRODUCTION

As discussed in Chapter I of this project, the ACC-WRN fiscal year 2012 contracting data was reviewed to determine if noncompetitive contracts were awarded based on being limited to a single source, or if a lack of access to competitive technical data rights had a significant impact on competition. ACC-WRN is located in Warren, Michigan, at the Detroit Arsenal—Tank Automotive and Armaments Command (TACOM), and is the contracting office responsible for acquiring goods and services on behalf of the tenant organizations located at TACOM. According to a briefing entitled “Army Contracting Command Overview” given to Major General Nichols on July 19, 2012, by ACC-WRN Executive Director of Contracting Mr. Harry Hallock, the ACC-WRN is comprised of 761 employees located amongst six geographic locations, and managed a total of \$137 billion (bn) in contracts and obligated \$14.3bn during fiscal year 2012.

The data presented and discussed throughout this chapter is limited to the ACC Warren site only, mainly because this portion of the command acquires a large amount of non-commercial items in comparison to the other locations. In addition, the items procured at this site are required to support the development, production, and sustainment of the Army’s ground vehicle fleet. Therefore, this site produces data that will help validate whether or not the lack of technical data rights impacts the DOD’s ability to acquire non-commercial items on a competitive basis throughout the acquisition life cycle. Some of the primary customers serviced and commodities procured by the ACC Warren site are shown in Tables 1 and 2.

Table 1. ACC Warren Primary Customers (from Hallock, 2012)

| FY12 Primary Customers Serviced | |
|---|---|
| PEO Ground Combat Systems | PEO Ammo |
| PEO Combat Support & Combat Service Support | RDECOM, TARDEC/ARDEC |
| PM System of Systems Integration | PM Light Armored Vehicle |
| Joint PEO Chemical Biological Defense | TACOM Integrated Logistics Support Center |
| PEO Soldier | Foreign Military Sales |
| Installation Management Activity | Other Services (Marine Corp, Navy, Air Force) |

Table 2. ACC Warren Commodities (from Hallock, 2012)

| FY12 Commodities Acquired | |
|--|---|
| Combat and Tactical Vehicles | Concept and Research & Development Efforts |
| Construction and Material Handling Equipment | Small Arms & Targetry |
| Fire Control Systems | Chemical Defense Equipment |
| Logistics and General Support | Base Operation Support & Depot Maintenance |
| Public/Private Partnerships | Sets, Kits, Outfits & Tools |
| Army Diving Program | Sustainment of Non-intrusive Cargo Inspection Systems |
| Optics | MRAP |
| Bridging | |

B. FY12 COMPETITION RESULTS

Chapter II, Section D.4 discussed the roles of the competition advocate of a procuring agency, and how his or her main responsibility is to promote full and open competition. CAs are required to prepare and submit an annual competition report to senior procurement executives of the agency. The following information was published in pp. 14–16 of the ACC-WRN report:

TACOM LCMC is one of the Department of Defense's major suppliers in the war effort and our competition rate for any year will always be influenced by the mix of systems that are being procured. Our Combat Vehicles - the Heavy Brigade Combat Team (HBCT) including: Abrams, Bradley, M88, M113, M109, Armored Knight Family, and the Stryker Family of Vehicles are the largest group. These are clearly not commercial in nature and require enormous investments from facilities to manufacturing. Some of these are our legacy systems and they require upgrades and modifications to keep in sync with our newer systems. Although competed initially, the cost and time invested in setting up to manufacture and the continuous upgrade and modification to these vehicles make them very poor candidates for competition. When significant dollars are obligated for these vehicles, our competition rate tends to be low. Most, if not all, of the Tactical Systems were initially competed. The Tactical Vehicles are procured to a Performance Specification. For competition, this means that each offeror meets the performance specification in a unique way.

TACOM LCMC equipment continues to lead the war effort. As a result TACOM LCMC has had a number of urgent requirements which have been clearly documented through Joint Urgency of Need Statements (JUONS). The December FY12 FPDS-NG report listing for items with a system cost over \$5.0M, non-competitive reflects that the non-competitive urgency requirements over \$5.0M equate to approximately \$605.4M, which is an increase from last year.

In spite of all of the unusual circumstances surrounding the TACOM LCMC acquisition process and the awarding of contracts by the Army Contracting Command-Warren, they have managed to compete 81.92% of the actions in the competition base and 40.01% of the dollars as of the FY12 yearend report. It should be noted that the competition base contains \$724.5M that was not available for competition. This issue has previously been elevated as a point of concern for gathering competition statistics by a number of agencies to include TACOM LCMC. The bulk of the non-competitive awards were for vehicles and hardware where the Government did not own the Technical Data Package.

While the initial buy of a vehicle can be fully competitive, any subsequent buys must be evaluated in terms of the cost of introducing a completely different vehicle. Support of Operations Enduring Freedom, Operation Iraqi Freedom/Operation New Dawn and the Overseas Contingency Operations required us to provide many items in such a short timeframe that competition was not possible. This included the RESET of our vehicles, new production vehicles and major components, and other upgrades and overhauls. It takes several years to plan and execute a competitive effort for a major system and when we were in a wartime scenario our primary goal was to meet the needs of the Warfighter and satisfy the urgent requirements. (ACC-WRN Report, 2012, pp. 14-16)

The TACOM CMO went on to discuss some of the efforts their office has done recently to assist TACOM LCMC in meeting and exceeding its competition goals. The CMO has asked to be consulted early in the planning stages of programs as the various acquisition strategy options and acquisition plans are being discussed and decided upon. The CMO also initiated training to new TACOM acquisition employees on the role of the competition advocate, the importance of the J&A process and market research, and the CMO's overall responsibilities it must exercise to assist ACC-WRN in meeting its requirements. Another key focus of the TACOM CMO is on its Source Approval Program, which is almost entirely generated by active market research, which per the report "is one of the keys to effective competition." Cost savings for the taxpayer and an increase in TACOM LCMC's overall ability to support the warfighter are achieved when additional contractors become approved sources of supply through this program.

The ACC-WRN report states that the ACC Warren location executed \$3.745bn on a competitive basis (38.63 percent) and \$9.694bn on a noncompetitive basis (61.37 percent). A complete breakdown of the ACC-WRN's competition results is provided in Table 3. It should be noted that the data shown in Table 3 is not commodity specific. In other words, the percentage of dollars competed shown does not take into account what type of items were being bought under the contracts.

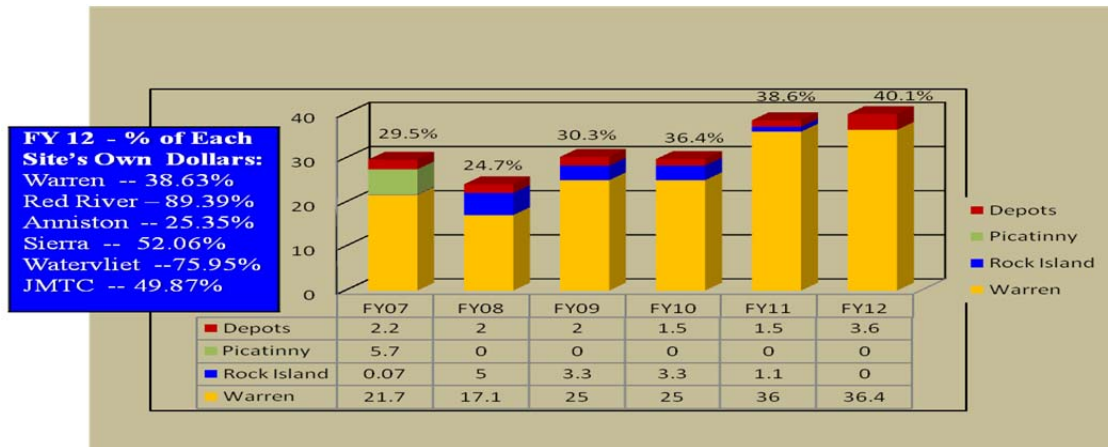
Table 3. ACC-WRN FY12 Competition Results
(from TACOM CMO, 2012, p. 1)

| | \$s COMPETED | BASE \$s | % COMPETED |
|---|------------------|------------------|---------------|
| Warren | \$3,744.9 | \$9,694.4 | 38.63% |
| Red River | \$210.7 | \$235.7 | 89.39% |
| Anniston | \$36.5 | \$143.8 | 25.35% |
| Sierra | \$17.4 | \$33.3 | 52.06% |
| Watervliet | \$50.9 | \$67.0 | 75.95% |
| Joint Manufacturing & Technology Center | \$51.3 | \$102.9 | 49.87% |
| Total for TACOM | \$4,111.7 | 10,277.1 | 40.01% |
| Total for TACOM excluding Not available for competition (Source directed FMS, 8A, etc) | \$4,111.7 | \$9,552.6 | 43.04% |

The TACOM Life Cycle Management Command competition goal for FY12, as set forth by the TACOM CMO and in conjunction with its customers, was 30 percent without foreign military sales (FMS). In spite of the need to make many awards expeditiously to support the war effort, ACC-WRN attained a Competition Performance Rate of 40.01 percent with FMS and 43.4 percent without FMS. Per the data provided in the report, TACOM LCMC exceeded its goal by over 10 percent.

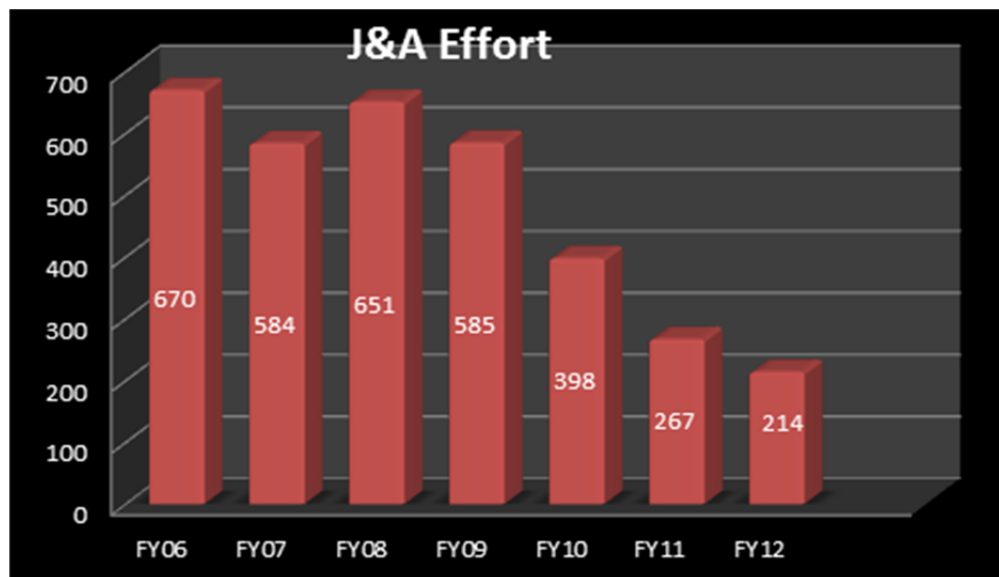
The ACC-WRN report also showed that the actual rate of competition steadily increased from fiscal year 2007 to 2012 on average. As depicted in the yellow portion of the bar graph in Table 4, the rate of competition for ACC-WRN in fiscal year 2007 was 21.7 percent, while in fiscal year 2012 it was 36.4 percent, which indicates a growth in competition.

Table 4. FY 12 Competition Performance Percentages of Total TACOM Dollars (from TACOM CMO, 2012, p. 2)



Subsequently, as shown in Table 5, the quantity of justifications for other than full and open competition processed at ACC-WRN decreased from 584 to 214, or 63.36 percent, during the same time period from 2007 to 2012.

Table 5. Number of J&As for FY06 to FY12 (from TACOM CMO, 2012, p. 24)



As identified in Chapter II, Section B, of this project report, there are seven statutory circumstances that permit other than full and open competition. Table 6 provides a summary of the competition rate of contracts actions awarded by TACOM in FY12. The table shows that over 50 percent of the non-competed actions cited “Only one responsible source and no other supplies or services will satisfy the agency requirements” as the statutory authority permitting other than full and open competition. This information is shown in the “Details of Other Than Full and Open Competition” portion of Table 6, under the “Only One Source—Other” category.

Table 6. FY12 Competition Summary (from TACOM CMO, 2012, *competition summary* worksheet tab)

| AMC | ACC | ACC-WRN | N/A | USA-ACC-WRN- DETROIT ARSENAL | | W56HZV |
|---|-----|---------|-----------|------------------------------|-----------|--------|
| Competition | | Actions | % Actions | Dollars | % Dollars | |
| Competition Base | | 25147 | | \$9,694,367,511 | | |
| Competed | | 20968 | 83.38% | \$3,744,920,117 | 38.63% | |
| Not Competed | | 2972 | 11.82% | \$5,343,026,172 | 55.11% | |
| Follow On to Competed | | 8 | 0.04% | (\$502,069) | -0.01% | |
| Not Available for Competition | | 1199 | N/A | \$606,923,291 | N/A | |
| Not Included in Competition Report (null value) | | 0 | N/A | \$0 | N/A | |
| Eligible Fair Opportunity/Limited Sources | | Actions | % Actions | Dollars | % Dollars | |
| Fair Opportunity Given | | 632 | 56% | \$1,060,478,942 | 73% | |
| Statutory Exception to Fair Opportunity | | 491 | 44% | \$395,826,000 | 27% | |
| TOTAL Eligible Fair Opportunity/Limited Sources | | 1123 | | \$1,456,304,942 | | |
| Statutory Exception to Fair Opportunity | | Actions | % Actions | Dollars | % Dollars | |
| Minimum Guarantee | | 24 | 2.14% | (\$883,422) | -0.06% | |
| Only One Source | | 234 | 20.84% | \$259,333,089 | 17.81% | |
| Urgency | | 8 | 0.71% | \$24,055,816 | 1.65% | |
| Follow-on DO Following Comp Initial Order | | 191 | 17.01% | \$102,700,290 | 7.05% | |
| Other Statutory Authority | | 34 | 3.03% | \$10,620,227 | 0.73% | |
| TOTAL EXCEPTION TO FAIR OPPORTUNITY | | 491 | | \$395,826,000 | | |
| Details of Competed Actions | | Actions | % Actions | Dollars | % Dollars | |

| | | | | |
|--|----------------|------------------|------------------------|------------------|
| COMPETED UNDER SAP | 5,028 | 19.99% | \$38,797,816 | 0.40% |
| FOLLOW ON TO COMPETED ACTION | 8 | 0.03% | \$-502,069 | -0.01% |
| FULL AND OPEN COMPETITION | 15,269 | 60.72% | \$3,454,849,152 | 35.64% |
| FULL AND OPEN COMPETITION AFTER EXCLUSION OF SOURCES | 671 | 2.67% | \$251,273,148 | 2.59% |
| NOT AVAILABLE FOR COMPETITION | 1,199 | 4.77% | \$606,923,291 | 6.26% |
| NOT COMPETED | 2,822 | 11.22% | \$5,337,049,285 | 55.05% |
| NOT COMPETED UNDER SAP | 150 | 0.60% | \$5,976,887 | 0.06% |
| TOTAL COMPETED ACTIONS | 25,147 | | \$9,694,367,511 | |
| Details of Other Than Full and Open Competition | Actions | % Actions | Dollars | % Dollars |
| AUTHORIZED BY STATUTE | 160 | 3.77% | \$45,728,489 | 0.77% |
| BRAND NAME DESCRIPTION | 13 | 0.31% | \$215,432 | 0.00% |
| FOLLOW-ON CONTRACT | 48 | 1.13% | \$-74,147,844 | -1.25% |
| INTERNATIONAL AGREEMENT | 1,067 | 25.16% | \$562,394,249 | 9.45% |
| MOBILIZATION, ESSENTIAL R&D | 7 | 0.17% | \$-131,066 | 0.00% |
| NATIONAL SECURITY | 5 | 0.12% | \$2,417,759 | 0.04% |
| ONLY ONE SOURCE – OTHER | 2,245 | 52.94% | \$3,106,704,352 | 52.21% |
| SAP NON-COMPETITION | 122 | 2.88% | \$4,777,440 | 0.08% |
| STANDARDIZATION | 2 | 0.05% | \$189,108 | 0.00% |
| UNIQUE SOURCE | 472 | 11.13% | \$1,700,352,388 | 28.57% |
| UNSOLICITED RESEARCH PROPOSAL | 4 | 0.09% | \$4,110,900 | 0.07% |
| URGENCY | 96 | 2.26% | \$598,315,022 | 10.05% |

FAR Subsection 6.302–1 discusses when the authority of “Only one responsible source” should be used by listing the following examples (not all inclusive) of situations where it may be appropriate:

- 1) When there is a reasonable basis to conclude that the agency’s minimum needs can only be satisfied by unique supplies or services available from only one source or only one supplier with unique capabilities.
- 2) The existence of limited rights in data, patent rights, copyrights, or secret processes; the control of basic raw material; or similar circumstances, make the supplies and services available from only one source (however, the mere existence of such rights or circumstances does not in and of itself justify the use of these authorities).
- 3) When acquiring utility services, circumstances may dictate that only one supplier can furnish the service; or when the contemplated contract is for construction of a part of a utility system and the utility company itself is the only source available to work on the system.
- 4) When the agency head has determined in accordance with the agency’s standardization program that only specified makes and models of technical equipment and parts will satisfy the agency’s needs for additional units or replacement items, and only one source is available.

The second example above, *the existence of limited rights in data, patent rights, copyrights, or secret processes*, is the key situation under the “Only One Responsible Source” authority and is the focus of the remaining data analysis conducted and summarized in this chapter. It is important to note that Technical Data, as discussed in Chapter III, Section C, is not just limited to engineering drawings but includes all “recorded information regardless of the form or method of recording.” This is significant because in the authors’ experience, there is a general misconception that if the government has unlimited rights to drawings for a given system, that this in itself creates the ability to openly compete with little risk involved. However, the J&As researched under the next section of this chapter show that the “how to build” aspect of producing parts is not always detailed on a fully competitive drawing, and most of time contractors create proprietary process sheets that provide the necessary detail on how to manufacture an item.

C. CONTRACT FILE FINDINGS

Chapter II, Part B, of this project discussed DOD's requirement to follow statute (CICA) when acquiring goods and services. CICA authorizes under certain conditions to contract without providing for full and open competition. A J&A is required to justify and obtain appropriate approvals to contract without providing for full and open competition as specified by the FAR. In an effort to identify the significance of the lack of technical data as a reason for awarding noncompetitive contracts at TACOM, relevant contracts were identified from the "Not Competed Actions" tab of the spreadsheet entitled *FY2012 Competition Report – Detroit Arsenal*, which provided a listing of all non-competed contracts awarded by TACOM in FY12. This analysis only took into account the high dollar value, non-competed FY12 contract actions and did not include other low dollar contract instruments such as purchase orders, delivery orders, and GSA orders. The rationale for this approach is because TACOM primarily handles higher dollar contract actions.

J&As were obtained and reviewed for the "top ten" dollar value, non-competed contract actions awarded by the ACC Warren site in FY12. Out of the J&As reviewed, seven out of 10 (or 70 percent) cited lack of technical data rights as a key reason for not being able to compete. The total dollar value for all related FY 12 sole source contracts at TACOM was \$1.21bn. The total dollar value for the top ten sole source contracts that were looked at was \$765 million, which is 63 percent of the total \$1.21bn awarded. The high percentages of 70 percent and 63 percent, respectively, show that a lack of technical data is a barrier to competition for TACOM and contributed to a high percentage of the total non-competed actions at the ACC Warren site in FY12. In the three J&As that did not list a lack of technical data as a key reason for awarding a sole source contract, an "unusual and compelling urgency" was cited as the authority for contracting without providing for full and open competition. It should be noted that this is a common authority used while at war, which was the case during FY12.

Although the authors of this project are not authorized to disclose specific details of the J&As, some general information will be shared as being relevant to this analysis. In one case, a \$58M contract was awarded sole source to upgrade a combat vehicle to a

later configuration. The J&A discusses how, while the government does own the rights to the TDP, it does not possess the process sheets needed to remanufacture vehicles to zero mile vehicles. It further states that the government requested that the contractor sell the process sheets to the government for the vehicle but the contractor formally declined. This portion of the J&A supports the information noted in the last paragraph of Section B of this chapter, which discusses that the “how to build” aspect of something is typically detailed in proprietary contractor process sheets versus drawings.

In other examples, the J&As state that although the government does have unlimited rights to portions of the TDP, the system being procured has many critical parts in which the TDPs are source controlled with proprietary data controlled by the contractor. In one case, the J&A notes that almost all of the drawings that the government only has limited rights to fall into the category of critical. Critical drawings are required to perform the effort satisfactorily. At a subsystem level, having unlimited rights to a portion of the TDP would allow the government to compete some parts of that subsystem, which is helpful for spare part procurements. However, at the vehicle system level, the government would require unlimited rights to all of the technical data in order to allow for a full and open procurement strategy of the vehicle.

A common theme is present in the J&As reviewed that referenced a lack of unlimited data rights by the government as a reason for not being able to competitively award the contract. Most of the J&As reviewed discussed how the government requested that the contractor provide a cost estimate for selling unlimited rights to the government for their data. In all these cases, the estimate the government received was either so high that procuring the data rights was far from being a cost effective approach, or the contractor refused to even provide an estimate whatsoever. This is not surprising as contractors, in an effort to look out for their shareholders, will only sell unlimited rights to the government if they believe it is in the best economic interests of their company.

D. GAO FINDINGS

Several findings from GAO report 10–833, in which separate data analysis were conducted and summarized, were found to be relevant to this project. For example, the

report concluded that DOD's lack of access to proprietary technical data and decades-long reliance on specific contractors for expertise, limit or even preclude the possibility of competition. In 57 percent of the noncompetitive DOD contracts they reviewed, the government was unable to compete requirements due to a lack of access to proprietary technical data (Government Accountability Office, 2010). This situation, combined with a heavy reliance on certain contractors' expertise built over years of experience, inhibits competition. Most of the contracting and program officials at DOD with whom GAO auditors spoke pointed to the lack of access to technical data as one of the main barriers to competition. Some contracting officers described this condition as essentially being "stuck" with a certain contractor. Several officials pointed out that the situation the government is currently experiencing "is a result of decisions made years ago" when first acquiring a weapon system, to not purchase critical technical data packages (TDPs) for reasons that included budgetary constraints or a push toward streamlined contracting processes by purchasing commercial items (Government Accountability Office, 2010). For a few of the contracts in the GAO sample, the government had purchased some of the technical data, but, for budgetary reasons, did not keep those data packages current over time. Hence, only the original equipment manufacturer had the technical data needed for follow-on maintenance and engineering support contracts. Some contracting and program officials have inquired about the cost of obtaining the technical data, only to discover that the package was not for sale or purchase of it would be cost-prohibitive, especially the systems and equipment that have been contracted out for decades (Government Accountability Office, 2010).

The GAO-10-833 report went on to state the following on the impact that technical data has on the ability to compete contracts within DOD, and recent steps that Congress has taken to address this issue:

Even when technical data are not an issue, the government may have little choice other than to rely on the contractors that were the original equipment manufacturers, and who, in some cases, designed and developed the weapon system. A few contracting and program officials we spoke with noted that for some DOD programs, the government is so reliant on the contractor that it is difficult for the government to even make decisions or set requirements anymore. Our prior work has noted the

government's increasing reliance on contractors and pointed to the challenges of this increasing reliance, such as identifying and distinguishing roles and responsibilities and ensuring appropriate oversight. Most non-competitive DOD contracts in our sample indicated that the contractor was the only source of the expertise for the system, having developed that expertise and the infrastructure over time. (Government Accountability Office, 2010, p. 21)

Recently, Congress has taken steps to address the lack of access to technical data. For example, the John Warner National Defense Authorization Act of Fiscal Year 2007 required DOD program managers for major weapons systems to assess the long-term technical data needs and establish corresponding acquisition strategies that provide for the technical data rights needed to sustain such systems over their life cycle. Further, Congress enacted legislation in May of 2009 that requires DOD to include in the acquisition strategy for each major defense acquisition program measures to ensure competition—or the option of competition—at both the prime contract level and subcontract level throughout the life-cycle of the program. This includes considering the acquisition of complete technical data packages, among other things. (Government Accountability Office, 2010, p. 20)

Another issue, as referenced in the GAO-10-833 report, discussed how the overall value of data from the FPDS-NG database could be in question (Government Accountability Office, 2010). FAR Section 4.602 discusses the Federal Procurement Data System (FPDS), which provides a comprehensive web-based tool for agencies to report contract actions. The resulting data provides a means of measuring and assessing the effect of other policy and management initiatives (e.g., performance-based acquisitions and competition). It was discovered that the data itself in the FPDS-NG database is oftentimes not accurate due to incorrect reporting. Although GAO's sample was not representative of all federal contract obligations, they found coding errors in FPDS-NG. Specifically, 19 of the 107 contracts and orders they reviewed, or about 18 percent, were coded incorrectly (Government Accountability Office, 2010). This would certainly skew the overall results reported from the system on the percentage of competed versus non-competed contract actions.

E. SUMMARY

The review of the ACC-WRN report, J&As from several FY12 ACC Warren site contracting actions, as well as GAO reports, helps shed light on the significant impact technical data rights have on competition in the federal acquisition process. Data from all three of these areas show that a lack of technical data rights can be a significant barrier to, and has a history of impeding, competition within DOD. The ensuing and final chapter to this project will offer conclusions, recommendations, and some suggestions for further research on the subject of technical data rights, in addition to providing the answers to the research questions presented in Chapter I.

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V. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS TO RESEARCH QUESTIONS

The following primary and secondary research questions were addressed during the course of this project. Each question and a brief answer are provided below.

1. Does the Government's Lack of Technical Data Rights Associated with Hardware Items, Significantly Impact DOD's Ability to Competitively Acquire Non-Commercial Items?

The conclusion drawn in response to this question is based on the analysis presented in Chapter IV of this project. In this chapter, it was revealed through the data analyzed and the ACC-WRN report that 61.37 percent of the FY12 funds executed by the ACC-WRN were done so on a noncompetitive basis. Out of the noncompetitive actions issued, this project reviewed the J&As associated with the top ten dollar value new contract instruments issued during the year. From this sample, it was discovered that 70 percent of the actions were issued on a sole source basis because of the government's lack of access to technical data. The value of these actions constituted 63 percent of the total value of all actions issued on an "Other than Full and Open" basis where the J&A cited "only one responsible source" as the statutory exception. Consequently, the results of the analysis lead one to conclude that the lack of access to technical data did have a significant impact on the ACC-WRN's ability to make some of the high dollar value actions available for competition in 2012.

2. Are There Obvious Changes that Can be Made to Key Statutes, Regulations or Other Policies Pertaining to Technical Data Acquisition That Would Likely Increase DOD's Ability to Competitively Acquire Non-Commercial Items?

The conclusion to this question was derived from the literature reviewed in Chapter III of this project. Based on the review of 10 U.S.C., Section 2320, one unlikely change that could be made is to require the contractor or subcontractor to relinquish its rights to the technical data of an item being bought by the government. Currently, paragraph (a)(2)(F) of the subject statute specifically states "A contractor or subcontractor (or a prospective contractor or subcontractor) may not be required, as a

condition for award of a contract— (i) to sell or otherwise relinquish to the United States any rights in technical data... .” While implementing this change would surely make it easier for the DOD to acquire unrestricted technical data, it would also create negative impacts on the overall state of competition that would be undesirable to the government and its constituents. This conclusive statement can be said with relative confidence because the DOD and industry already experienced a period whereby a prospective contractor was required to forfeit its data rights as a condition for award of a contract. This technique and industry’s successful lobbying of Congress to abolish its use was discussed in Chapter III of this project. Therefore, while the DOD could press Congress to change the law back, the likelihood of this happening is considered to be very doubtful.

Another change that could be made pertains to regulation and finding ways to better define the DOD’s overarching technical data acquisition objective. Currently, DFARS Subsection 227.7103–1 says the DOD’s objective “is to acquire only the technical data, and the rights in that data, necessary to satisfy agency needs.” Perhaps a potential issue with this objective is that the agencies needs are commonly established by the program manager in charge of a system when it is being developed, in lieu of a DOD board that’s charged with affecting long term data management strategies across the portfolio of Program Executive Office programs.

3. What are the Major Laws, Orders, Guidance, and Regulations that Establish the Government’s Preference to Buy Items on a Competitive Basis?

During the course of this project, many laws, orders, guidance, and regulations were reviewed, as pertaining to the government’s policy to buy items and services on a competitive basis. Some of the major statutory and policy documents that were examined included:

- Competition in Contracting Act (CICA) (S. 2127), which was first introduced in 1982 and later codified into United States Code, Title 10, Subtitle A, Part IV, Chapter 137, Section 2304 in 1984.
- President Barack Obama 2009 letter issued to all government contracting personnel reminding them of their obligation to the American taxpayer.

- Better Buying Power memorandum issued by Dr. Ashton B. Carter, the Undersecretary of Defense for Acquisition, Technology, and Logistics on June 28, 2010. A subsequent memorandum entitled “Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending,” issued on September 14, 2010, by Dr. Carter was also examined. These two pieces of guidance create an initiative aimed at increasing efficiency and productivity within the DOD, and it specifically aims at promoting real competition with the acquisition process.
- Better Buying Power 2.0 memorandum issued by Mr. Frank Kendall, the current Undersecretary of Defense for Acquisition, Technology, and Logistics on November 13, 2012. This memo was reviewed because it continues to reemphasize the BBP initiatives, as established by Dr. Carter.
- FAR Section 1.102—Statement of Guiding Principles for the Federal Acquisition System. This section of the FAR establishes the vision for the Federal Acquisition System and establishes its tenets, which in part includes the promise that government acquisition employees will promote competition.
- The Office of Federal Procurement Policy Act Section 20 and FAR Section 6.501—Competition Advocates, which both establish the role of Competition Advocates who are responsible for promoting full and open competition for each procuring activity.
- FAR Part 6Competition Requirements in general was examined, with specific references made to FAR Subsection 6.303–2, which outlines the requirements for permitting “Other Than Full and Open Competition.”
- FAR Section 34.002—Major System Acquisition and FAR Subsection 34.005–1 discusses the requirement for program managers to promote full and open competition and sustain effective competition throughout the acquisition life cycle.
- DOD Directive 5000.01 was examined to understand the relationship and responsibility a program manager of an acquisition program has as it relates to competition.

4. What Are the Rationale and Motives for Establishing a System that Emphasizes Competitive Contracting Procedures?

The rationale and motives for establishing a system that emphasizes the use of competitive procedures to acquire goods and services were found in several of the documents examined as part of this project. The most recent rationale and motives were provided in the letter issued by President Barack Obama (reference Chapter II, paragraph A, last bullet) and the BBP letters issued by Dr. Carter and Mr. Frank Kendall (reference Abstract). In both cases, the president and the undersecretaries pinpoint competition as a

means for obtaining greater cost savings, contractor performance, and accountability for results on behalf of the taxpayer. The DODD 5000.01 (Chapter II, paragraph C, p. 18) also seems to support the same overarching benefits identified by the president and the undersecretaries because it also states that competition can provide major incentives to industry and government organizations to innovate, reduce cost, and increase quality. Lastly, the BBP letter issued on September 14, 2010, talks about how competition increases the participation among:

small businesses that (sic) have repeatedly demonstrated their contribution to leading the nation in innovation and driving the economy by their example of hiring over 65 percent of all new jobs and holding more patents than all the nation's universities and large corporations combined. (Cater, 2010, p. 10)

5. What Are some of the Government's Current Recommendations to Increase its Ability to Procure Items on a Competitive Basis?

Based on the information reviewed during this project, a list of prospective policy or business practice recommendations were noted in the September 14, 2010, memorandum issued by Dr. Ashton Carter. The specific recommendations made by the undersecretary are summarized below:

- Present a competitive strategy to the appropriate program acquisition executive (i.e. Defense Acquisition Executive or Component Acquisition Executive) at each program milestone.
- Conduct negotiations with all single bid offerors and that the basis of negotiations shall be cost or price analysis, as the case may be, using non certified data.
- Remove obstacles to competition by lessening the advantage of incumbent contractors during source selections by equalizing the evaluation factors so the technical factor cannot overshadow the past performance and cost factor. In addition, the need to identify and share potential requirements with industry in advance is stressed as means for increasing proposal responsiveness.
- Require each competition advocate to develop a plan to improve both the overall rate of competition and the rate of effective competition.
- Require open systems architectures and set rules for acquisition of technical data rights. Specifically a business case analysis must be presented at Milestone B to outline the approach for using open systems architectures and acquiring technical data rights to ensure sustained

consideration for competition in the acquisition of weapon systems is given. (Carter, A., 2010)

6. What Type of Programs does the TACOM LCMC Employ to Affect Competition?

Based on the information presented in ACC-WRN report, the TACOM LCMC uses the following practices and programs to affect competition within its acquisition processes:

- The Competition Management Office attends all peer reviews conducted by the ACC-WRN. These reviews are conducted at a variety of points during the contracting cycle, which allows the Competition Advocate an opportunity to participate and help influence the competitive contracting strategy when possible. The Competition Advocate also plays a significant role in terms of reviewing and approving or concurring in J&As staffed at the command. Once again, this allows the Competition Advocate another opportunity to influence the contracting strategy prior to it being officially approved. Finally, the Competition Advocate facilitates the development of competition by gathering and publicizing prospective requirements from the organizations that reside at the TACOM LCMC. Examples of such efforts facilitated by the Competition Advocate's Office include the Source Approval Program, Competition Advocate Shopping List, and Advance Planning Brief to Industry.
- The Competition Advocate uses a mandatory buyer boot camp class as platform for providing training on market research to new buyers. It also partners with the local Small Business Office to find potential small businesses that are capable of performing prospective requirements.

B. RECOMMENDATIONS

Based on the information presented in this project, TACOM's acquisition community should consider adopting the following recommendation:

1. Develop Commodity Specific Competition Expectations

Recommendation 1: That the TACOM acquisition community begin tracking, pulling, and analyzing commodity fields for TACOM LCMC contracts awarded by ACC-WRN.

One area of concern that has been recognized through the research conducted under this project is the apparent lack of commodity specific expectations related to DOD's guidance on increasing competition. The data has shown that different levels of

competition should be expected depending on the nature of items being bought. In the guidance given to the acquisition community by senior DOD leadership, it just emphasizes the need to increase competition. However, the research has shown that the ability to compete a procurement is affected by many factors. Some of these factors include whether or not the commodity being bought is a product versus a service, a major system versus a small subsystem, and a new system versus a legacy system. The last factor was discussed on p. 15 of the ACC-WRN report, where it discusses legacy systems and how “although competed initially, the cost and time invested in setting up to manufacture and the continuous upgrade and modification to these vehicles make them very poor candidates for competition.” One recommendation is for the TACOM acquisition community to start tracking, pulling, and analyzing commodity fields for TACOM LCMC contracts awarded by ACC-WRN. If data can be assembled to show DOD leadership that expected competition levels are commodity dependent, more realistic and specific goals could be developed instead of having a blanket competition goal across the board.

2. Offer Incentives to Government Personnel and Contractors

To further create an acquisition environment that avails itself to the maximum amount of competitive contracting opportunities, TACOM should adopt the following recommendations:

a. Incentives for Contractors

Recommendation 2: That the TACOM acquisition community offer incentives to contractors within the contract solicitation aimed at increasing competition during the source selection process.

In order for this to have an impact, incentives should be offered early on in a program’s life cycle, ideally during the source selection process. Competition could be used as an evaluation factor during the government’s review of contractor proposals. In order for this approach to be effective, the focus should be placed on non-complex, high replacement components within a vehicle system instead of major assemblies or the vehicle system itself. There are recent examples of the government, in vehicle proposal solicitations, requesting fully detailed Technical Data Packages for entire vehicle systems

that can be used for competition. As one can imagine, DOD contractors have been reluctant to provide vehicle-level TDPs with unlimited government data rights as it can prevent them from being awarded future contracts for that vehicle system. However, if during the solicitation process vehicle original equipment manufacturers (OEMs) are incentivized to increase competition at the component level, they may be much more inclined to participate. It is well documented throughout DOD that the cost for sustaining a vehicle system throughout its life cycle is higher than both the costs for the initial development and production of a vehicle. Increasing competition for spare part procurements could significantly lower the costs for sustaining a vehicle over its life cycle. Incentivizing vehicle OEMs to develop competitive TDPs at the component level should not negatively impact their chances for being awarded future contracts for the vehicle system. This contracting approach could, however, prevent unreasonable spare part inflation costs over time and could help drive down the overall cost to support the vehicle over time.

b. Incentives for Government Personnel

Recommendation 3: That the TACOM LCMC begin offering monetary awards to employees that help increase competition and subsequently save cost to the taxpayer.

As introduced in Chapter I, Section G, the ACC-WRN report was analyzed to determine what incentive programs and techniques, if any, were used to generate competition throughout TACOM. The report shows several cases where government employees were recognized for excellence by receiving various awards from Army acquisition leadership. While being recognized by leadership either at an individual or team level can be viewed as a form of incentive, it may be more effective to offer monetary awards for individuals that help increase competition and subsequently save cost to the taxpayer. DOD has established similar programs that offer monetary awards to government personnel that are involved with projects that help reduce programs costs. One example of this is the “Value Engineering” program. As defined in FAR Subpart 2.1, “Value engineering” (VE) means an analysis of the functions of a program, project, system, product, item of equipment, building, facility, service, or supply of an executive

agency, performed by qualified agency or contractor personnel, directed at improving performance, reliability, quality, safety, and life cycle costs. Successful VE projects yield reductions in program life cycle costs, and monetary awards are typically given to individuals involved with the project once the savings initiatives are implemented. It is the belief of the authors of this project that employees typically respond well to monetary incentives. Therefore, establishing a monetary award incentive program in the area of increasing competition could yield positive results. If acquisition professionals receive just a small portion of the savings from helping increase competition, this should incentivize them to always be looking for ways to help increase competition throughout a product's life cycle.

A monetary award incentive program would help increase the level of involvement from employees in PMs and PEOs, which in turn should increase competition opportunities overall. It appeared from the ACC-WRN report that the office primarily responsible for increasing competition at TACOM is the CMO. PM employees are the ones responsible for managing the day to day activities of a specific program, and therefore should be much more aware of and influential to any potential efforts for increasing competition on that program. A monetary award incentive program could ultimately help establish a grass roots-level approach, possibly a more effective venue for increasing competition throughout TACOM and other DOD procuring agencies.

3. Perform Additional Research

Recommendation 4: That the TACOM LCMC study Business Case Analyses (BCAs) conducted by programs it manages to assess the average cost comparisons between competitive versus noncompetitive contracting strategies.

Further research and studies conducted on this subject could provide more answers on the topic of data rights and their effect on competition within the federal acquisition process. One particular area that could be studied is the cost comparisons from formal BCAs that looked at various programs' life cycle costs with using a competitive versus noncompetitive contracting strategy. As presented in the Chapter 1 of this study, Dr. Carter's 2010 BBP memorandum established a requirement for programs

of record to present a BCA at Milestone B, which would outline an approach for acquiring technical data rights to ensure sustained competition. Although a significant amount of guidance exists on the importance of increasing competition through the acquisition of data rights, an investigation of the cost comparisons generated from BCAs could help quantify any potential cost savings. A study such as this could identify the costs involved with the government purchasing unlimited data rights from a contractor at the beginning of a program's life cycle as well as later on into a program's life cycle, and could compare those costs to those associated with a sole source contracting strategy that is used throughout a program's entire life cycle. An analysis of several BCAs showing the cost comparisons between competitive versus noncompetitive contracting strategies would identify, on a large scale, overall potential savings (if any) from the purchase of data rights and the subsequent ability to compete high dollar value contracts.

Recommendation 5: That the TACOM LCMC conduct research to determine the validity and accuracy of the BCAs published by programs it manages.

In addition to analyzing the return on investment results from BCAs, further research should be done on the validity and accuracy of the BCAs themselves. Chapter 3, Part B, noted one of GAOs findings from their 11-469 report entitled *DOD Should Clarify Requirements for Assessing and Documenting Technical-Data Needs*. The report noted that BCAs were often "inconsistently completed" (Government Accountability Office, 2011). There could be a colossal impact from this assessment. If BCAs are the main mechanism being used by DOD acquisition executives for deciding whether or not to purchase data rights for competitive procurements, thoroughness, accuracy, and uniformity of the information in the BCAs is critical. For major programs, millions and sometimes billions of taxpayer dollars can be at stake with these decisions. Therefore, a study on the completeness and consistency of BCAs throughout ACC-WRN, and specifically the TACOM LCMC, could identify potential shortfalls with the current guidance and requirements set forth by DOD leadership as it relates to determining the correct contracting strategy for major programs.

Recommendation 6: That DOD sponsor research to determine whether-or-not the tracking and establishment of commodity specific goals actually does occur within the department.

A final recommendation for future study relates to the information presented in Part B.1 of this chapter. Research could be conducted to determine if the tracking and establishment of commodity specific goals actually does occur within some DOD procuring agencies. If it is determined that this is not being done at all within DOD, research into why the commands haven't historically created various competition goals based on commodity averages could be explored. Overall, the findings from this study could help identify problems and offer solutions to the way DOD leadership has required procuring agencies to establish and meet yearly competition goals.

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